WHAT IS CLAIMED IS

1. A peptide derived from a protein selected from the group consisting of Uroplakin (UP), Prostate specific antigen (PSA), Prostate specific membrane antigen (PSMA), Prostate acid phosphatase (PAP), Lactadherin (BA-46), Mucin (MUC1) and Teratocarcinoma-derived growth factor (CRIPTO-1), the peptide comprising 8 to 10 amino acid residues, of which a second residue from an amino terminal of the peptide and an end residue at a carboxy terminal of the peptide are hydrophobic or hydrophilic natural or non-natural amino acid residues.

2. The peptide of claim 1, wherein the peptide is derived from Uroplakin.

3. The peptide of claim 2, wherein said Uroplakin is selected from the group consisting of Uroplakin II, Uroplakin Ia, Uroplakin III and Uroplakin Ib.

4. The peptide of claim 3, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:1-19 and 50-64.

5. The peptide of claim 1, wherein the peptide is derived from said Prostate specific antigen (PSA).

6. The peptide of claim 5, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:20-24.

7. The peptide of claim 1, wherein the peptide is derived from said Prostate specific membrane antigen (PSMA).

8. The peptide of claim 7, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:25-30.

9. The peptide of claim 1, wherein the peptide is derived from said Prostate acid phosphatase (PAP).

10. The peptide of claim 9, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:31-34.

11. The peptide of claim 1, wherein the peptide is derived from said Mucin.

12. The peptide of claim 11, wherein the peptide is derived from a non-tandem repeat array of said Mucin.

13. The peptide of claim 11, wherein the peptide is derived from a region selected from the group consisting of a signal peptide, a cytoplasmic domain and an extracellular domain of said Mucin.

14. The peptide of claim 13, wherein the peptide is derived from a non tandem repeat array of said Mucin.

15. The peptide of claim 11, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:42-49.

16. The peptide of claim 1, wherein the peptide is derived from said Lactadherin (BA-46).

17. The peptide of claim 16, wherein the peptide has a sequence selected from the group consisting of SEQ ID NOs:35-41.

18. The peptide of claim 1, wherein the peptide is derived from said Teratocarcinoma-derived growth factor (CRIPTO-1).

19. The peptide of claim 18, wherein the peptide has the sequence selected from the group consisting of SEQ ID Nos. 66 to 77.

20. The peptide of claim 1, wherein said Uroplakin (UP), Prostate specific antigen (PSA), Prostate specific membrane antigen (PSMA), Prostate acid phosphatase (PAP), Lactadherin (BA-46), Mucin (MUC1) and Teratocarcinoma-derived growth factor (CRIPTO-1) are each independently of mammalian origin.

21. The peptide of claim 20, wherein said mammal is selected from the group consisting of a humanoid and a rodent.

22. The peptide of claim 1 having a sequence selected from the group consisting of SEQ ID NOs:1-64 and 66 to 77.

23. The peptide of claim 1, wherein said peptide includes at least one non-natural modification.

24. The peptide of claim 23, wherein said non-natural modification renders peptides more immunogenic or more stable.

25. The peptide of claim 23 or 24, wherein said at least one modification is selected from the group consisting of peptoid modification, semipeptoid modification, cyclic peptide modification, N terminus modification, C terminus modification, peptide bond modification, backbone modification and residue modification.

26. A pharmaceutical composition comprising, as an active ingredient, at least one peptide as set forth in any of claims 1-25 and a pharmaceutically acceptable carrier.

27. The pharmaceutical composition of claim 26, wherein said carrier is selected from the group consisting of a proteinaceous carrier to which said at least one tumor associated antigen peptide is linked, an adjuvant, a protein or a recombinant protein and an antigen presenting cell.

28. The pharmaceutical composition of claim 26, wherein the composition is effective in prevention or cure of cancer or cancer metastases.

29. The pharmaceutical composition of claim 28, wherein said cancer is selected from the group consisting of breast, bladder, prostate, pancreas, ovary, thyroid, colon, stomach and head and neck cancer.

30. The pharmaceutical composition of claim 28, wherein said cancer is a carcinoma.

31. The pharmaceutical composition of claim 26, wherein the composition is a vaccine.

32. A vaccine composition comprising, as an active ingredient, at least one peptide as set forth in any of claims 1-25 and a suitable carrier.

33. The vaccine composition of claim 32, wherein said carrier is selected from the group consisting of a proteinaceous carrier to which said at least one tumor associated antigen peptide is linked, an adjuvant, a protein or a recombinant protein and an antigen presenting cell.

34. The vaccine composition of claim 32, wherein the composition is effective in prevention or cure of cancer or cancer metastases.

35. The vaccine composition of claim 34, wherein said cancer is selected from the group consisting of breast, bladder, prostate, pancreas, ovary, thyroid, colon, stomach and head and neck cancer.

36. The vaccine composition of claim 34, wherein said cancer is a carcinoma.

37. A method of prevention or cure of a cancer or of metastases thereof comprising the step of administering to a patient an effective amount of the pharmaceutical composition of any of claims 26-31.

38. A method of prevention or cure of a cancer or of metastases thereof comprising the step of vaccinating a patient with an effective amount of the vaccine composition of any of claims 32-36.

39. A polynucleotide encoding at least one peptide according to any of claims 1-25.

40. A polynucleotide encoding at least one peptide according to any of the SEQ ID Nos. 1 to 64 and 66 to 77.

41. The polynucleotide of claim 39 or 40, wherein the polynucleotide forms a part of a longer polynucleotide designed to encode a fused protein product from which said at least one peptide is cleavable by a protease.

42. A pharmaceutical composition comprising, as an active ingredient, at least one polynucleotide at set forth in any claims 39-41 and a pharmaceutically acceptable carrier.

43. A cellular vaccine composition comprising an antigen presenting cell presenting at least one peptide derived from a protein selected from the group consisting of Uroplakin (UP), Prostate specific antigen (PSA), Prostate specific membrane antigen (PSMA), Prostate acid phosphatase (PAP), Lactadherin (BA-46) Mucin (MUC1) and Teratocarcinoma-derived growth factor (CRIPTO-1), the at least one peptide comprising 8 to 10 amino acid residues, of which a second residue from an amino terminal of the peptide and a carboxy terminal residue of the peptide are hydrophobic or hydrophilic, natural or non-natural amino acid residues.

44. The cellular vaccine composition of claim 43, wherein said antigen presenting cell is selected from the group consisting of a dendritic cell, a macrophage, a B cell and a fibroblast.

45. The cellular vaccine composition of claim 43, wherein said antigen presenting cell is caused to present said at least one tumor associated antigen peptide by a method selected from the group consisting of:

(a) genetically modifying said antigen presenting cell with at least one polynucleotide encoding said at least one tumor associated antigen peptide such that said peptide or at least one longer polypeptide including said peptide will be expressed;

(b) loading said antigen presenting cell with at least one polynucleotide encoding said at least one tumor associated antigen peptide;

(c) loading said antigen presenting cell with said at least one tumor associated antigen peptide; and

(d) loading said antigen presenting cell with at least one longer polypeptide including said at least one tumor associated antigen peptide

46. The peptide of claim 1, wherein the second residue and the end residue are neutral, hydrophobic and aliphatic.

47. The pharmaceutical composition of any of claims 26 to 31 and 42 also comprising a helper peptide.

48. The pharmaceutical composition of claim 47, wherein the helper peptide has a T helper epitope.

49. The vaccine composition of any of claims 32 to 36 also comprising a helper peptide.

50. The vaccine composition of claim 49 wherein the helper peptide has a T helper epitope.

51. Use of the at least one peptide of claims 1 to 25 in the manufacture of a medicament, substantially as described in the specification.

52. The at least one peptide of claims 1 to 25 for use as a medicament.

53. Use of the at least one peptide of claims 1 to 25 in the manufacture of a medicament for the prevention or cure of a cancer or cancer metastases, substantially as described in the specification.

54. The at least one peptide of claims 1 to 25 for use as a medicament for the prevention or cure of a cancer or cancer metastases.

55. A peptide derived from a protein selected from the group consisting of Uroplakin (UP), Prostate specific antigen (PSA), Prostate specific membrane antigen (PSMA), Prostate acid phosphatase (PAP), Lactadherin (BA-46) and Mucin (MUC1) and Teratocarcinoma-derived growth factor (CRIPTO-1), the peptide comprising 8-10 amino acid residues as selected so as to promote effective binding to a MHC class 1 type molecule such that a CTL response is elicitable.